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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,764	08/09/2001	Dusan Miljkovic	700.15-US1	5911

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EXAMINER

LEWIS, PATRICK T

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 06/05/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/927,764	<b>Applicant(s)</b> MILJKOVIC, DUSAN	
	<b>Examiner</b> Patrick T. Lewis	<b>Art Unit</b> 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) ____.   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references in the specification are not listed on a proper information disclosure statement. Therefore, unless the references have been cited by the examiner on form PTO-892, applicant should not assume these references have been considered.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "skin preparation enhancer" is unclear and not defined in the specification. In the absence of an explanation or definition clearly describing the term, the scope of the claim cannot be determined and is therefore indefinite.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 12-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Miljkovic et al. US 6,080,425 (Miljkovic).

Miljkovic discloses a cosmetic composition comprising a boron complex in a suitable solvent system, a microemulsion or macroemulsion form, or a suitable liposome form (column 3, lines 10-14). The boron is complexed with fructose, sorbose, mannitol, sorbitol, xylitol, ascorbic acid, serine, or threonine (column 2, lines 49-63). The compositions are preferably adapted for efficient penetration through the skin stratum corneum barrier when applied topically (column 3, lines 16-18). The compositions are to be rubbed onto the skin several times per day (column 5, lines 19-28) to reduce skin wrinkles (column 2, lines 37-42). Miljkovic does not disclose the compositions as being collagenase inhibitors. However, applicant discloses a preference of using the borate complexes of Miljkovic as the active agent in the instant cosmetic preparation.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miljkovic et al. US 6,080,425 (Miljkovic).

Claims 1-12 are drawn to a cosmetic preparation comprising a collagenase inhibitor at a concentration effective to reduce a collagenase activity in a skin, wherein the collagenase inhibitor comprises boron.

Miljkovic discloses a cosmetic composition comprising a boron complex in a suitable solvent system, a microemulsion or macroemulsion form, or a suitable liposome form (column 3, lines 10-14). The boron is complexed with fructose, sorbose, mannitol, sorbitol, xylitol, ascorbic acid, serine, or threonine (column 2, lines 49-63). The concentration of boron in the compositions is  $10^{-6}$  to 10 weight % (column 5, lines 19-28). The compositions are preferably adapted for efficient penetration through the skin stratum corneum barrier when applied topically (column 3, lines 16-18). The compositions are to be rubbed onto the skin several times per day (column 5, lines 19-28) to reduce skin wrinkles (column 2, lines 37-42).

Miljkovic does not disclose collagenase activity comprising hydrolysis of collagen I and collagen IV. Miljkovic does not disclose the amount collagenase activity reduction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Miljkovic to arrive at the instantly claimed invention. Although the reference does not specifically teach that the borate complexes inhibits collagenase activity, the claims are drawn to the product *per se* and inherently, such a borate complex would inhibit collagenase activity. Thus, the claimed cosmetic preparation appears to be the same as the prior art. The office does not have the facilities and resources to provide the factual evidence needed in order to establish that the product of the prior art does not possess the same material, structural and functional characteristics of the claimed product. In the absence of evidence to the contrary, the burden is on the applicant to prove that the claimed product is different from those taught by the prior art and to establish patentable differences. See *In re Best* 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and *Ex parte Gray* 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989). Additionally, applicant discloses the preference for using the boron complexes of Miljkovic as collagenase inhibitors (page 6, lines 19-30).

9. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miljkovic et al. US 6,080,425 (Miljkovic).

Claims 13-20 are drawn to a method of reducing collagenase activity in skin comprising applying to the skin a cosmetic preparation comprising a collagenase inhibitor at a concentration effective to reduce a collagenase activity in a skin, wherein the collagenase inhibitor comprises boron.

Miljkovic discloses a cosmetic composition comprising a boron complex in a suitable solvent system, a microemulsion or macroemulsion form, or a suitable liposome

form (column 3, lines 10-14). The boron is complexed with fructose, sorbose, mannitol, sorbitol, xylitol, ascorbic acid, serine, or threonine (column 2, lines 49-63). The concentration of boron in the compositions is  $10^{-6}$  to 10 weight % (column 5, lines 19-28). The compositions are preferably adapted for efficient penetration through the skin stratum corneum barrier when applied topically (column 3, lines 16-18). The compositions are to be rubbed onto the skin several times per day (column 5, lines 19-28) to reduce skin wrinkles (column 2, lines 37-42).

Miljkovic does not disclose collagenase activity comprising hydrolysis of collagen I and collagen IV.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Miljkovic to arrive at the instantly claimed invention. Although the reference does not specifically teach that the borate complexes inhibit collagenase activity, the claims are drawn to the use of identical borate complexes and inherently, such a borate complex would inhibit collagenase activity. Additionally, applicant discloses the preference for using the boron complexes of Miljkovic as collagenase inhibitors (page 6, lines 19-30). Thus, the claimed method for reducing collagenase activity appears to be unpatentable over the prior art. The office does not have the facilities and resources to provide the factual evidence needed in order to establish that the product of the prior art does not possess the same material, structural and functional characteristics of the claimed product. In the absence of evidence to the contrary, the burden is on the applicant to prove that the claimed product is different from those taught by the prior art and to establish patentable differences. See In re

Best 562F.2d 1252, 195 USPQ 430 (CCPA 1977) and Ex parte Gray 10 USPQ 2d 1922 (PTO Bd. Pat. App. & Int. 1989).

### **Conclusions**

10. Claims 1-20 are pending. Claims 1-20 are rejected. No claims are allowed.

### **Contacts**

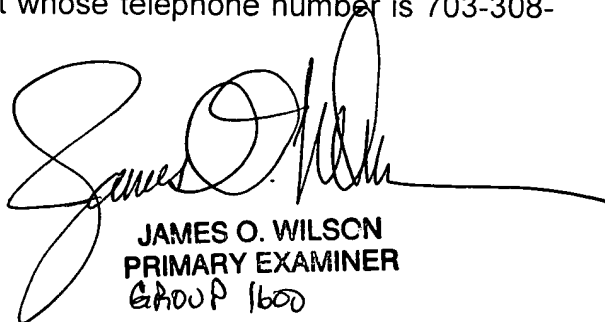
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick T. Lewis whose telephone number is 703-305-4043. The examiner can normally be reached on M-F 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 703-308-4532. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Patrick T. Lewis  
Examiner  
Art Unit 1623

ptl  
May 29, 2002



JAMES O. WILSON  
PRIMARY EXAMINER  
GROUP 1600